

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/564,751  
Source: JFWP  
Date Processed by STIC: 1-30-06

***ENTERED***



IFWP

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/564,751

DATE: 01/30/2006

TIME: 14:53:45

Input Set : N:\SMITH\PTO.TS.txt  
 Output Set: N:\CRF4\01302006\J564751.raw

3 <110> APPLICANT: DeveloGen AG fur entwicklungsbiologische Forschung  
 5 <120> TITLE OF INVENTION: Use of a DG065 secreted protein product for preventing  
 6 and treating pancreatic diseases and/or obesity and/or  
 7 metabolic syndrome  
 9 <130> FILE REFERENCE: 31362PWO\_GE  
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/564,751  
 C--> 12 <141> CURRENT FILING DATE: 2006-01-17  
 14 <150> PRIOR APPLICATION NUMBER: 03016171.5  
 15 <151> PRIOR FILING DATE: 2003-07-16  
 17 <150> PRIOR APPLICATION NUMBER: 03016246.5  
 18 <151> PRIOR FILING DATE: 2003-07-17  
 20 <150> PRIOR APPLICATION NUMBER: 03016711.8  
 21 <151> PRIOR FILING DATE: 2003-07-22  
 23 <150> PRIOR APPLICATION NUMBER: 03018326.3  
 24 <151> PRIOR FILING DATE: 2003-08-12  
 26 <160> NUMBER OF SEQ ID NOS: 20  
 28 <170> SOFTWARE: PatentIn Ver. 2.1  
 30 <210> SEQ ID NO: 1  
 31 <211> LENGTH: 2808  
 32 <212> TYPE: DNA  
 33 <213> ORGANISM: Artificial Sequence  
 35 <220> FEATURE:  
 36 <223> OTHER INFORMATION: Description of Artificial Sequence: primer  
 38 <220> FEATURE:  
 39 <221> NAME/KEY: gene  
 40 <222> LOCATION: (1)..(2808)  
 41 <223> OTHER INFORMATION: nucleic acid sequence encoding human DG008 protein  
 43 <400> SEQUENCE: 1  
 44 cggcatgaga ggccagcctg ccagggaaat ccaggaatct gcaacaaaaa cgatgacagt 60  
 45 ctgaaatact ctctgggcc aacctccaaa ttctcgtctg tcacttcaga ccccccactag 120  
 46 ttgacagagc agcagaatat caactccagt agacttgaat gtgcctctgg gcaaagaagc 180  
 47 agagctaacg aggaaaggaa tttaaagagt ttttcttggg tgtttgcata acttttattc 240  
 48 cctgtctgtg tgcagagggg attcaacttc aattttctgc agtggctctg ggtccagccc 300  
 49 cttacttaaa gatctggaaa gcatgaagac tgggcctttt ttccttatgtc tcttggaaac 360  
 50 tgcagctgca atccccacaa atgcaagatttattatgtat cattccaaac caactgctga 420  
 51 aacggtagca cctgacaaca ctgcaatccc cagtttatgg gctgaagctg aagaaaaatga 480  
 52 aaaagaaaaca gcagtatcca cagaagacga ttcccoaccat aaggctgaaa aatcatcagt 540  
 53 actaaagtca aaagaggaaa gccatgaaca gtcagcagaa cagggcaaga gttctagcca 600  
 54 agagctggaa ttgaaggatc aagaggacag tgatgtcac ttaagtgtga atttggagta 660  
 55 tgcaccaact gaaggtacat tggacataaa agaagatatg attgagcctc aggagaaaaa 720  
 56 actctcagag aacactgtattttggctcc tggtgttagt tccttcacag attctaacca 780  
 57 acaagaaaatc acacaaaaga gagaggaaaa ccaagaacaa octagaaaattt attcacatca 840  
 58 tcagttgaac aggagcagta aacatagcca aggcotaagg gatcaaggaa accaagagca 900

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/564,751

DATE: 01/30/2006

TIME: 14:53:45

Input Set : N:\SMITH\PTO.TS.txt

Output Set: N:\CRF4\01302006\J564751.raw

59 ggatccaaat atttccaaatg gagaagagga agaagaaaaa gagccagggtg aagttggtag 960  
 60 ccacaaatgtat aaccaagaaa gaaagacaga attgcccagg gagcatgcta acagaagca 1020  
 61 ggaggaagac aataccaaat ctgatgatat tttggaaagag tctgtatcaac caactcaagt 1080  
 62 aagcaagatg caggaggatg aatttgcata gggtaaccaa gaacaagaag ataactccaa 1140  
 63 tgcagaaaatg gaagaggaaa atgcatacgaa cgtcaataag cacattcaag aaactgaatg 1200  
 64 gcagagtc当地 gagggtaaaa ctggcctaga agctatcagc aaccacaaag agacagaaga 1260  
 65 aaagactgtt tctgaggctc tgctcatgga acctactgtat gatggtaata ccacgcccag 1320  
 66 aaatcatgga gttgtatgtat atggcgatga tgatggcgat gatggcggca ctgtatggccc 1380  
 67 caggcacagt gcaagtgtatg actacttcat cccaaagccag gcctttctgg aggccgagag 1440  
 68 agctcaatcc attgccttatac acctcaaaaat tgaggagcaa agagaaaaag tacatgaaaa 1500  
 69 tggaaaatata ggtaccactg agcctggaga gcaccaagag gccaagaaaag cagagaactc 1560  
 70 atcaaataatgag gaggaaacgt caagtgaagg caacatgagg gtgcatacgctg tggattcttg 1620  
 71 catgagcttc cagtgtaaaa gaggccacat ctgttaaggca gaccaacagg gaaaacctca 1680  
 72 ctgtgtctgc caggatccag tgacttgc tccaaacaaa ccccttgatc aagttgtgg 1740  
 73 cactgacaat cagacccatg ctatccctg tcatacttgc gctactaaat gcagactgga 1800  
 74 ggggacccaa aaggggccatc aactccagct ggattatgtt ggaggcctgca aatctattcc 1860  
 75 tacttgtacg gacttgcgg tgattcgtt tcctctacgg atgagagact ggctcaagaa 1920  
 76 tatacctcatg cagctttagt aagccaaactc tgaacatgct gtttatctaa atgagaagca 1980  
 77 gagaataaaa gtcaagaaaa ttacctgga tgaaaagagg cttttggctg gggaccatcc 2040  
 78 cattgatctt ctcttaaggg actttaagaa aaactaccac atgtatgtgt atccctgtgca 2100  
 79 ctggcagttt agtgaacttg accaacaccc tatggataga gtcttgacac attctgaact 2160  
 80 tgctccctctg cgagcatctc tggtgcccatt ggaacactgc ataacccgtt tctttgagga 2220  
 81 gtgtgacccc aacaaggata agcacatcac cctgaaggag tggggccact gcttggaaat 2280  
 82 taaaagaagag gacatacatg aaaatctctt gtttgcacg agattttaa agaactcaac 2340  
 83 ttcccagcat cctccctctgt tctaaccact tcagaaatat atgcagctgt gataacttgta 2400  
 84 gatttatatt tagcaaaaatg ttagcatgtat tgacaagaca atgagagtaa ttgcttgaca 2460  
 85 acaacccatg caccaggat ttaacattaa ctttggaaac aaaaatgtac aattaagtaa 2520  
 86 agtcaacata tgcaaaaatc tgcattttgtt gaacagaagt ttaattcata gtaatttcac 2580  
 87 tctctgcatt gacttatgatg ataattaatg attaaactat taatgataaaa aataatgcac 2640  
 88 ttgtattgtt cataatatca tgcacttc aagaaaatgg aatgctactc ttttgtgggtt 2700  
 89 tacgtgtatt atttcaata tcttaatacc ctaataaaga gtccataaaa atccaaaaaaa 2760  
 90 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2808

93 &lt;210&gt; SEQ ID NO: 2

94 &lt;211&gt; LENGTH: 664

95 &lt;212&gt; TYPE: PRT

96 &lt;213&gt; ORGANISM: human

98 &lt;220&gt; FEATURE:

99 &lt;223&gt; OTHER INFORMATION: amino acid sequence of human DG008 protein

101 &lt;400&gt; SEQUENCE: 2

102 Met Lys Thr Gly Pro Phe Phe Leu Cys Leu Leu Gly Thr Ala Ala Ala

103 1 5 10 15

105 Ile Pro Thr Asn Ala Arg Leu Leu Ser Asp His Ser Lys Pro Thr Ala

106 20 25 30

108 Glu Thr Val Ala Pro Asp Asn Thr Ala Ile Pro Ser Leu Trp Ala Glu

109 35 40 45

111 Ala Glu Glu Asn Glu Lys Glu Thr Ala Val Ser Thr Glu Asp Asp Ser

112 50 55 60

114 His His Lys Ala Glu Lys Ser Ser Val Leu Lys Ser Lys Glu Glu Ser

115 65 70 75 80

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/564,751

DATE: 01/30/2006  
TIME: 14:53:45

Input Set : N:\SMITH\PTO.TS.txt  
Output Set: N:\CRF4\01302006\J564751.raw

117 His Glu Gln Ser Ala Glu Gln Gly Lys Ser Ser Ser Gln Glu Leu Gly  
118 85 90 95  
120 Leu Lys Asp Gln Glu Asp Ser Asp Gly His Leu Ser Val Asn Leu Glu  
121 100 105 110  
123 Tyr Ala Pro Thr Glu Gly Thr Leu Asp Ile Lys Glu Asp Met Ile Glu  
124 115 120 125  
126 Pro Gln Glu Lys Lys Leu Ser Glu Asn Thr Asp Phe Leu Ala Pro Gly  
127 130 135 140  
129 Val Ser Ser Phe Thr Asp Ser Asn Gln Gln Glu Ser Ile Thr Lys Arg  
130 145 150 155 160  
132 Glu Glu Asn Gln Glu Gln Pro Arg Asn Tyr Ser His His Gln Leu Asn  
133 165 170 175  
135 Arg Ser Ser Lys His Ser Gln Gly Leu Arg Asp Gln Gly Asn Gln Glu  
136 180 185 190  
138 Gln Asp Pro Asn Ile Ser Asn Gly Glu Glu Glu Glu Lys Glu Pro  
139 195 200 205  
141 Gly Glu Val Gly Thr His Asn Asp Asn Gln Glu Arg Lys Thr Glu Leu  
142 210 215 220  
144 Pro Arg Glu His Ala Asn Ser Lys Gln Glu Glu Asp Asn Thr Gln Ser  
145 225 230 235 240  
147 Asp Asp Ile Leu Glu Glu Ser Asp Gln Pro Thr Gln Val Ser Lys Met  
148 245 250 255  
150 Gln Glu Asp Glu Phe Asp Gln Gly Asn Gln Glu Gln Glu Asp Asn Ser  
151 260 265 270  
153 Asn Ala Glu Met Glu Glu Glu Asn Ala Ser Asn Val Asn Lys His Ile  
154 275 280 285  
156 Gln Glu Thr Glu Trp Gln Ser Gln Glu Gly Lys Thr Gly Leu Glu Ala  
157 290 295 300  
159 Ile Ser Asn His Lys Glu Thr Glu Glu Lys Thr Val Ser Glu Ala Leu  
160 305 310 315 320  
162 Leu Met Glu Pro Thr Asp Asp Gly Asn Thr Thr Pro Arg Asn His Gly  
163 325 330 335  
165 Val Asp Asp Asp Gly Asp Asp Gly Asp Asp Gly Gly Thr Asp Gly  
166 340 345 350  
168 Pro Arg His Ser Ala Ser Asp Asp Tyr Phe Ile Pro Ser Gln Ala Phe  
169 355 360 365  
171 Leu Glu Ala Glu Arg Ala Gln Ser Ile Ala Tyr His Leu Lys Ile Glu  
172 370 375 380  
174 Glu Gln Arg Glu Lys Val His Glu Asn Glu Asn Ile Gly Thr Thr Glu  
175 385 390 395 400  
177 Pro Gly Glu His Gln Glu Ala Lys Lys Ala Glu Asn Ser Ser Asn Glu  
178 405 410 415  
180 Glu Glu Thr Ser Ser Glu Gly Asn Met Arg Val His Ala Val Asp Ser  
181 420 425 430  
183 Cys Met Ser Phe Gln Cys Lys Arg Gly His Ile Cys Lys Ala Asp Gln  
184 435 440 445  
186 Gln Gly Lys Pro His Cys Val Cys Gln Asp Pro Val Thr Cys Pro Pro  
187 450 455 460  
189 Thr Lys Pro Leu Asp Gln Val Cys Gly Thr Asp Asn Gln Thr Tyr Ala

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/564,751

DATE: 01/30/2006

TIME: 14:53:45

Input Set : N:\SMITH\PTO.TS.txt  
Output Set: N:\CRF4\01302006\J564751.raw

190 465 470 475 480  
 192 Ser Ser Cys His Leu Phe Ala Thr Lys Cys Arg Leu Glu Gly Thr Lys  
 193 485 490 495  
 195 Lys Gly His Gln Leu Gln Leu Asp Tyr Phe Gly Ala Cys Lys Ser Ile  
 196 500 505 510  
 198 Pro Thr Cys Thr Asp Phe Glu Val Ile Gln Phe Pro Leu Arg Met Arg  
 199 515 520 525  
 201 Asp Trp Leu Lys Asn Ile Leu Met Gln Leu Tyr Glu Ala Asn Ser Glu  
 202 530 535 540  
 204 His Ala Gly Tyr Leu Asn Glu Lys Gln Arg Asn Lys Val Lys Lys Ile  
 205 545 550 555 560  
 207 Tyr Leu Asp Glu Lys Arg Leu Leu Ala Gly Asp His Pro Ile Asp Leu  
 208 565 570 575  
 210 Leu Leu Arg Asp Phe Lys Lys Asn Tyr His Met Tyr Val Tyr Pro Val  
 211 580 585 590  
 213 His Trp Gln Phe Ser Glu Leu Asp Gln His Pro Met Asp Arg Val Leu  
 214 595 600 605  
 216 Thr His Ser Glu Leu Ala Pro Leu Arg Ala Ser Leu Val Pro Met Glu  
 217 610 615 620  
 219 His Cys Ile Thr Arg Phe Phe Glu Glu Cys Asp Pro Asn Lys Asp Lys  
 220 625 630 635 640  
 222 His Ile Thr Leu Lys Glu Trp Gly His Cys Phe Gly Ile Lys Glu Glu  
 223 645 650 655  
 225 Asp Ile Asp Glu Asn Leu Leu Phe  
 226 660  
 230 <210> SEQ ID NO: 3  
 231 <211> LENGTH: 2947  
 232 <212> TYPE: DNA  
 233 <213> ORGANISM: human  
 235 <220> FEATURE:  
 236 <221> NAME/KEY: gene  
 237 <222> LOCATION: (1)..(2947)  
 238 <223> OTHER INFORMATION: nucleic acid sequence encoding human DG065 protein  
 240 <400> SEQUENCE: 3  
 241 ctccccccac ctccgcccacc atgctgctcc cccagctctg ctggctgccg ctgctcgctg 60  
 242 ggctgctccc gccgggtccc gtcagaagt ttcggcgct cacgttttg agagtggatc 120  
 243 aagataaaaga caaggattgt agcttggact gtgcgggttc gccccagaaa cctctctgctg 180  
 244 catctgacgg aaggaccttc ctttcccgtt gtgaatttca acgtgccaag tgcaaagatc 240  
 245 cccagctaga gattgcatat cgaggaaact gcaaagacgt gtccagggtgt gtggccgaaa 300  
 246 ggaagtatac ccaggagcaa gcccggaaagg agttcagca agtgttcatc cctgagtgca 360  
 247 atgacgacgg cacctacagt cagggtccagt gtcacagcta cacgggatac tgctgggtgcg 420  
 248 tcacgccccaa cggggggccc atcagcggca ctgcgtggc ccacaagacg ccccggtgcc 480  
 249 cgggttccgt aaatgaaaag ttaccccaac gcgaaaggcac aggaaaaaaca gtctccttgc 540  
 250 aaatcttttc cggtctgaat tcaaatgtatc ccgcagctcc agcgttggag actcagcctc 600  
 251 aaggagatga agaagatatt gcatcacgtt accctaccct ttggactgaa cagttaaaa 660  
 252 gtcggcagaa caaaaccaat aagaattcag tgcacatctg tgaccaagag caccagtctg 720  
 253 ccctggagga agccaagcag cccaaagaacg acaatgtggat gatccctgag tgcgcgcacg 780  
 254 gccgcctcta caagccagtg cagtgccacc cctccacggg gtactgctgg tgcgtctgg 840  
 255 tggacacggg gcgccccatt cccggcacaat ccacaaggta cgagcagccg aaatgtgaca 900.

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/564,751

DATE: 01/30/2006  
TIME: 14:53:45

Input Set : N:\SMITH\PTO.TS.txt  
Output Set: N:\CRF4\01302006\J564751.raw

256 acacggccag ggccaccca gccaaagccc gggacctgta caagggccgc cagctacaag 960  
 257 gttgtccggg tgccaaaaag catgagttc tgaccagcg tctggacgcg ctgtccacgg 1020  
 258 acatggtcca cgccgcctcc gacccctct cctcgtcagg caggctctca gaacccgacc 1080  
 259 ccagccatac cctagaggag cgggtggtgc actgttactt caaactactg gataaaaaact 1140  
 260 ccagcggaga catcggcaaa aaggaaatca aacccttcaa gaggttctt cgcaaaaaat 1200  
 261 caaagcccaa aaaatgtgtg aagaagttt tgaaatactg tgacgtgaat aatgacaaat 1260  
 262 ccatctccgt acaagaactg atgggctgcc tggcgtggc gaaagaggac ggccaaagcgg 1320  
 263 acaccaagaa acgcccacacc cccagaggc atgctgaaag tacgtctaat agacagccaa 1380  
 264 gaaaaacaagg ataaatggct catacccccga aggcaattcc tagacacatg gaaaatttcc 1440  
 265 ctcaccaaag agcaatthaag aaaacaaaaa cagaaacaca tagtatttgc actttgtact 1500  
 266 ttaaatgtaa attcaattt tagaaatgag ctattnaac agactgtttt aatctgtgaa 1560  
 267 aatggagagc tggcttcaga aaattaatca catacaatgt atgtgtctc ttttgacctt 1620  
 268 gaaaaatctgt atgtggtgg aagttttt aatgcattt ggcttaattt ctgcgcctc 1680  
 269 cacatgttaa cagtagagct otatgcactc cggctgcaat cgtatggctt tctctaacc 1740  
 270 ctgcagtcac ttccagatgc ctgtgcttac agcattgtgg aatcatgtt gaaagctccac 1800  
 271 atgtccatgg aagttgtga tgcacggccg accctacagg cagttacat gcatgggctg 1860  
 272 tttgtttct tgggattttc ttttagtttgc tcttggatgg atcttgcata 1920  
 273 tacaatgaat cacgcaacca ottaaagctat ccagttaaatgtt gcaatggatccccc 1980  
 274 aaataatatt ttcaaaactgt ctgtggtgg atacatttgc tcaaaggatc tttgctttc 2040  
 275 catttaagc ttctgttttgc agttttgc tggggcttgc atgagtccca gagatcggtt 2100  
 276 ccgatggtgg gaggctgcct aggaggcagt aaatccagtc acagtgctg ggagggggccc 2160  
 277 atccttccaa aatgtaaatc cagtcgcgtt gtgaccgc tggctaaacag gctgtctgc 2220  
 278 ctggttttcc tcctacacat ggcattttt ctcctgatcc tcctacctgg tccacccca 2280  
 279 ggctaccgga aggtaaaatc ttcacctgaa ccaattatga gcagtcctt tactgaaggt 2340  
 280 acagccggat acgtggtggc cccggggctg gtgtggcag cgggggggag gtgcctgagg 2400  
 281 gtccccacgg ttcccttctg cttttctgaa tgcataagg gtacgagaac ttgccaatgg 2460  
 282 gaaattcattc cgagtggcac tggcagagaa ggttggatgg ggaatgcaca cacagtgacc 2520  
 283 aacagaactg gtctgcgtgc ataaccagct gccaccctca ggcctggcc ccagagctca 2580  
 284 gggcacccag tgcataagg aaccatttttgg aggacagtct gagagcagga acttcaagct 2640  
 285 gtgattctat ctgcgttcag acttttttttggatgg gaaaaaaatgtt cttcatggcc ccaaattcccc 2700  
 286 tgagacatgc ttgttagaaat gatttttgtga tttttgtatgc ctttgtggagc atcgcgtaa 2760  
 287 gcttcttgc tatattaaact gtgcaggatc aaaatcaagc ctttggagcc acagaaccag 2820  
 288 ctcaagtaca tgccaatgtt gtttaagaaa cagttatgtatgc cttaaactt ttggataatc 2880  
 289 ttttatattt ctgacccttgc aatttaatca ttgttcttag attaaaataa aatatgctat 2940  
 290 tgaaact 2947  
 293 <210> SEQ ID NO: 4  
 294 <211> LENGTH: 457  
 295 <212> TYPE: PRT  
 296 <213> ORGANISM: human  
 298 <220> FEATURE:  
 299 <223> OTHER INFORMATION: amino acid sequence of human DG065 protein  
 301 <400> SEQUENCE: 4  
 302 Met Leu Leu Pro Gln Leu Cys Trp Leu Pro Leu Leu Ala Gly Leu Leu  
 303 1 5 10 15  
 305 Pro Pro Val Pro Ala Gln Lys Phe Ser Ala Leu Thr Phe Leu Arg Val  
 306 20 25 30  
 308 Asp Gln Asp Lys Asp Lys Asp Cys Ser Leu Asp Cys Ala Gly Ser Pro  
 309 35 40 45  
 311 Gln Lys Pro Leu Cys Ala Ser Asp Gly Arg Thr Phe Leu Ser Arg Cys

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/564,751

DATE: 01/30/2006

TIME: 14:53:46

Input Set : N:\SMITH\PTO.TS.txt

Output Set: N:\CRF4\01302006\J564751.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date